6.1 INTRODUCTION

The purpose of this section is to identify and describe alternatives to the Palisades at Squaw Project. Project alternatives are developed to reduce or eliminate the significant or potentially significant adverse environmental effects identified as a result of the proposed project while still meeting most if not all of the basic project objectives.

An environmental impact report (EIR) must evaluate a reasonable range of alternatives to a proposed project, or to the project location, that could feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives (CEQA Guidelines Section 15126.6). The EIR need not evaluate the environmental effects of alternatives in the same level of detail as the proposed project, but must include enough information to allow meaningful evaluation, analysis, and comparison with the proposed project.

The primary intent of the alternatives analysis is to disclose other ways that the objectives of the project could be attained while reducing the magnitude of or avoiding the environmental impacts of the proposed project. Alternatives that are included and evaluated in the EIR must be feasible alternatives. However, the Public Resources Code and the CEQA Guidelines direct that the EIR need "set forth only those alternatives necessary to permit a reasoned choice." The CEQA Guidelines provide a definition for "a range of reasonable alternatives" and thus limit the number and type of alternatives that need to be evaluated in a given EIR. An EIR is not required to analyze alternatives when the effects of the alternative "cannot be reasonably ascertained and whose implementation is remote and speculative" (CEQA Guidelines Section 15126.6(f)(3)).

SUMMARY OF SIGNIFICANT IMPACTS

The following significant impacts were identified for the proposed project:

Impact 4.2.3 The project could result in long-term operational emissions that could violate or substantially contribute to a violation of federal and state standards. (less than significant with mitigation)

Impact 4.3.1 Project-related activities could result in substantial adverse impacts to special-status plant species. (less than significant with mitigation)

Impact 4.3.3 Project-related activities could result in substantial adverse effects, either directly or through habitat modifications, to raptors, special-status avian species, and birds protected under the MBTA. (less than significant with mitigation)

Impact 4.3.4 Project-related activities could result in substantial adverse effects, either directly or through habitat modifications, to special-status bat species. (less than significant with mitigation)

Impact 4.3.7 Project-related activities would result in the removal of 616 of the 1,297 trees on-site that would require compliance with Article 12.20, Tree Preservation in Area East of Sierra Summit, of the Placer County Code. (less than significant with mitigation)

Impact 4.3.8 The proposed project, in combination with other reasonably foreseeable projects, could result in mortality and loss of habitat for special-status species and associated habitats. (less than cumulatively considerable with mitigation)

Impact 4.4.1 Construction of the proposed project has the potential to encounter previously unknown subsurface historic, prehistoric, or archaeological resources. (less than significant with mitigation)

Impact 4.4.2 Construction of the proposed project could inadvertently result in disturbance of human remains. (less than significant with mitigation)

Impact 4.5.1 An inferred earthquake fault has been mapped across the eastern portion of the project site, requiring further evaluation to determine its potential for surface rupture. (less than significant with mitigation)

Impact 4.5.5 Project implementation would require cuts and fills and excavations that could become unstable if not properly designed and constructed. (less than significant with mitigation)

Impact 4.7.1 The Phase I ESA prepared for the project site identified multiple recognized environmental concerns on the site including areas of debris and the potential for naturally-occur radon on the site. (less than significant with mitigation)

Impact 4.7.2 Project could interfere with emergency evacuation procedures along Squaw Valley Road during emergencies involving wildland fire and other incidents.. (less than significant with mitigation)

Impact 4.8.1 Project construction activities could have the potential to adversely affect surface water and groundwater quality. (less than significant with mitigation)

Impact 4.8.2 Project operation could result in runoff from impervious surfaces that could negatively affect receiving waters. (less than significant with mitigation)

Impact 4.8.3 The proposed project would increase impervious surface area within the project site which in turn would increase stormwater runoff. (less than significant with mitigation)

Impact 4.8.6 Cumulative development and land use changes in the Squaw Creek watershed could degrade surface and groundwater water quality. (less than cumulatively considerable with mitigation)

Impact 4.8.7 Cumulative development and land use changes within the Squaw Valley Public Service District service boundaries would increase demand for water supply, potentially depleting groundwater supplies. (less than cumulatively considerable with mitigation)

Impact 4.8.8 Cumulative development and land use changes in the Squaw Valley would increase drainage rates and potentially result in flooding impacts. (less than cumulatively considerable with mitigation)

Impact 4.9.1 Project construction could result in the exposure of persons to or generation of noise levels in excess of County noise standards, as short-term construction noise is exempt from all noise level standards and construction is limited to daytime hours. (less than significant with mitigation)

Impact 4.9.3 The proposed project could expose residents to stationary sources of noise in excess of established standards. (less than significant with mitigation)

Impact 4.10.2 As a residential use, the proposed project would not directly generate any employment. However, the proposed project may result in indirect employment growth, requiring the construction of additional employee housing. (less than significant with mitigation)

Impact 4.12.5 The proposed project would not be expected to create any traffic hazards. However, adequate driver sight distance must be provided at the proposed project access intersections. (less than significant with mitigation)

Impact 4.12.7 Implementation of the proposed project would increase demand in transit ridership. (less than significant with mitigation)

Impact 4.12.10 Implementation of the proposed project would not degrade the level of service at any study intersection under future cumulative conditions, but would need to contribute towards intersection improvements. (less than cumulatively considerable with mitigation)

Impact 4.12.11 The proposed project under future cumulative conditions would have cumulatively considerable contribution to cumulative roadway capacity impacts. (less than cumulatively considerable with mitigation)

PROJECT ALTERNATIVES ANALYZED IN THE DEIR

The alternatives to the proposed project analyzed in this Draft EIR are intended to minimize environmental impacts while still meeting the basic objectives of the project. The County has established the following objectives for the project for the purposes of CEQA:

- Provide diverse housing opportunities for Squaw Valley residents.
- Promote infill development in Squaw Valley.
- Develop the project site consistent with the vision of the Squaw Valley General Plan.
- Preserve the natural and aesthetic resources on the project site as feasible.

In accordance with the provisions of CEQA Guidelines Section 15126.6, the following alternatives are evaluated at a qualitative level of detail:

- Alternative 1 – No Project Alternative (No Development)
- Alternative 2 – No Project Alternative (Maximum Density Development)
- Alternative 3 – Reduced Density Development Alternative

The environmental effects of each of these alternatives are identified and compared with those resulting from the proposed project. A table at the end of this section provides a summary of the comparisons and, per CEQA Guidelines Section 15126.6(e)(2), an "environmentally superior" alternative is identified.

6.2 ALTERNATIVE 1 – NO PROJECT ALTERNATIVE (NO DEVELOPMENT)

Alternative 1 is one of two No Project Alternatives evaluated in this section. CEQA Guidelines Section 15126.6(e)(1) states that a No Project Alternative shall be analyzed. The purpose of describing and analyzing a No Project Alternative is to allow decision-makers to compare the impacts of approving the proposed project with the impacts of not approving the proposed project. The No Project Alternative analysis is not the baseline for determining whether the environmental impacts of the proposed project may be significant. The No Project Alternative (No Development) would result in the project site remaining in the condition as described in the existing setting. Because there would be no change to the project site under this alternative, no physical effects would occur and this alternative is not analyzed further.

6.3 ALTERNATIVE 2 – NO PROJECT ALTERNATIVE (MAXIMUM DENSITY DEVELOPMENT)

Alternative 2 is the second of two No Project Alternatives evaluated in this section. As described previously, the purpose of describing and analyzing a No Project Alternative is to allow decision-makers to compare the impacts of approving the proposed project with the impacts of not approving the proposed project. Under the Maximum Density Development Alternative, it is assumed that the project site develops consistent with the existing General Plan land use designation and zoning for the site.

CHARACTERISTICS

Under the Maximum Density Development Alternative, the project would not be approved and the project site would be developed according to its land use designation as adopted under the Squaw Valley General Plan and Land Use Ordinance: High Density Residential–Density Factor 20 (HDR DF-20). The HDR DF-20 land use designation and zone allows residential uses at a density of up to 20 bedrooms per acre. Based on this maximum density, it is assumed that the project site could be developed with up to 240 residential units. This alternative residential unit type would be townhouse/condominium style with attached units, parking lots, and common open space areas similar in layout to the previously proposed Sena at Squaw Valley project for this site. None of the project's proposed recreational amenities would be developed under this alternative.

COMPARATIVE ANALYSIS

Impacts Reduced Compared to the Proposed Project

The Maximum Density Development Alternative would not reduce any of the impacts identified in Sections 4.1 through 4.12.

Impacts Identical or Similar to the Proposed Project

Geology and Soils

The Maximum Density Development Alternative would result in similar impacts related to geology and soils as the proposed project. Any construction on the site would be required to comply with all applicable regulations, which require that project designs reduce potential adverse soils, geology, and seismicity effects to less than significant levels. There would be no additional impact under this alternative.

Hazards and Hazardous Materials

The Maximum Density Development Alternative would result in similar impacts related to hazards and hazardous materials as the proposed project because generally the same area would be disturbed, requiring the same mitigation measures identified in this Draft EIR to address the recognized environmental concerns identified in the Phase I Environmental Site Assessment (ESA) and emergency access/evacuation.

Hydrology and Water Quality – Water Quality

Development under the Maximum Density Development Alternative would have a similar potential to degrade surface water and groundwater quality, which could be mitigated to a level of insignificance through compliance with existing regulations and implementation of required best management practices (BMPs).

Public Services and Utilities

The Maximum Density Development Alternative would incrementally increase demand for public services similar to the proposed project. However, increased fees and tax revenues from the additional residential units would fund the necessary expansion of services. It is not anticipated that new or expanded facilities would be required to serve the development under this alternative.

Impacts More Severe Than the Proposed Project

Aesthetics, Light, and Glare

The Maximum Density Development Alternative would result in the development of more residential units compared to the proposed project, which would increase the density and mass of development on the site and likely require the removal of more trees and other scenic resources. Structures on the project site would still be limited to 35 feet in height and would be subject to design review. However, accommodating the increased density on the site could reduce open space buffers along the northern or eastern site boundaries and thus reduce screening for the adjacent uses and the State Route (SR) 89 corridor. Given the wooded nature of the site and surrounding parcels, the increased development proposed under this alternative would not result in substantially greater impacts to scenic vistas. However, the increased building density and area of disturbance would result in greater impacts to the site's visual character and quality as well as greater levels of light and glare.

Air Quality and Greenhouse Gas Emissions

The Maximum Density Development Alternative would result in the development of more residential units compared to the proposed project. This alternative would require a longer construction period and operation of additional construction equipment, thus increasing criteria air pollutant and greenhouse gas (GHG) emissions during construction. In addition, development under this alternative would result in more vehicle trips and thus greater operational criteria air pollutant and GHG emissions. Therefore, this alternative would result in greater impacts to air quality. Implementation of mitigation measure MM 4.2.3 could reduce operational emissions to less than significant, as with the project, but additional mitigation would likely be required to reduce construction emissions to a less than significant level.

Biological Resources

As noted above, the Maximum Density Development Alternative would result in the development of more residential units compared to the proposed project, increasing the area that would be disturbed by project operation, including tree removal. Therefore, this alternative has the potential to result in increased impacts to biological resources compared to the proposed project. Like the proposed project, mitigation measures identified in this Draft EIR could reduce impacts on biological resources to a less than significant level.

Cultural Resources

The Maximum Density Development would result in the development of more residential units compared to the proposed project, increasing the area that would be disturbed by project operation. Therefore, this alternative has the potential to result in increased impacts to known and previously undiscovered subsurface cultural resources compared to the proposed project. Like the proposed project, mitigation measures identified in this Draft EIR could reduce impacts on cultural resources to a less than significant level.

Hydrology and Water Quality – Drainage and Groundwater Supplies

The Maximum Density Development Alternative would result in the development of more residential units and thus a larger area of impervious surfaces compared to the proposed project. Therefore, this alternative would result in greater volumes of stormwater runoff, as well as greater demand for groundwater supplies that could result in lowering of the groundwater elevations and impacting aquatic and riparian habitat on Squaw Creek. Depending on the amount of additional impervious surfaces, additional and/or larger infiltration basins could be required to offset drainage increases.

Noise

Under the Maximum Density Development Alternative, there would be more intense development. As a result, it is expected that construction noise and vibration would be greater than with the proposed project. A greater number of residential units on the site would be operating HVAC systems and other stationary noise sources. Additionally, more residents and visitors would enter and leave the site, which would result in greater operational noise associated with vehicle use. Like the proposed project, mitigation measures identified in this Draft EIR could reduce noise impacts to less than significant levels.

Population and Housing

The Maximum Density Development Alternative would result in the development of more residential units than the proposed project, which would more potential for employment in the region than the proposed project (7 full-time equivalent employees [FTEE] as compared to the proposed project with 2 FTEEs) and require the consideration of employee housing consistent with Housing Element Policy C-2. Implementation of Mitigation Measure MM 4.10.2 could mitigate this impact.

Public Services and Utilities

The Maximum Density Development Alternative would result in the development of more residential units than the proposed project, which would result in greater demand for water supply, wastewater conveyance and treatment, and solid waste collection and disposal services. Based on a per unit water demand rate of 550 gallons per day, this alternative would demand an additional 88,000 gallons per day or 98.6 acre-feet annually (AFY) (as compared to project water demands of 49.3 AFY) and would result in a corresponding increase in wastewater generation of 1.05 million gallons per day (mgd) (as compared to the project wastewater generation at 0.035 mgd). An increase in residential units would also result in increased generation of solid waste and demand for electricity and propane. This alternative may require the development of a new well facility to accommodate the water supply demand, as well as require improvements to wastewater conveyance facilities that could cause additional environmental impacts.

Transportation and Traffic

The Maximum Density Development Alternative would result in the development of more residential units than the proposed project, which would result in more vehicle trips entering and leaving the project site as well as additional total vehicle miles traveled in the Tahoe Basin. This alternative would result in similar impacts related to emergency access, driving hazards, and alternative transportation. This volume increase could also result in significant changes in traffic operations that would be inconsistent with County level of service standards.

Conclusion

The Maximum Density Development Alternative would result in greater impacts compared to the proposed project. This alternative, however, would achieve all of the project objectives.

6.3 ALTERNATIVE 3 – REDUCED DENSITY DEVELOPMENT ALTERNATIVE

CHARACTERISTICS

The Reduced Density Development Alternative would result in development of a residential neighborhood on the project site at a lower density than the proposed project. Under this alternative, 30 residential units would be constructed in the same footprint and with the same internal roadway design as the proposed project but on larger lots. This alternative would include open space buffers along the northern and eastern boundaries of the site as well as recreational features similar to the proposed project. It is assumed that this alternative would not include second units.

COMPARATIVE ANALYSIS

Impacts Reduced Compared to the Proposed Project

Aesthetics, Light, and Glare

The Reduced Density Development Alternative would result in the development of fewer residential units compared to the proposed project, which would decrease the density and mass of development and likely leave more open space, trees, and other scenic resources such as rock outcroppings undisturbed on the site. Similar to the proposed project, development under this alternative would be limited to 35 feet in height, and open space buffers would be provided to screen the residential uses north of the site and the SR 89 corridor east of the site. Also similar to the proposed project, development under this alternative would be subject to design review to ensure quality design as well as building materials and a color palette compatible with the surrounding uses. Therefore, this alternative would result in reduced impacts to scenic vistas, the visual character and quality of the project site, and light and glare levels in the area compared to the proposed project.

Air Quality and Greenhouse Gas Emissions

The Reduced Density Development Alternative would result in the development of fewer residential units compared to the proposed project. Given the reduced unit count, construction under this alternative would likely require less equipment use, thus reducing criteria air pollutant and GHG emissions during construction. In addition, development under this alternative would result in fewer vehicle trips and thus lower operational criteria air pollutant and GHG emissions. Like the proposed project, if determined necessary, implementation of mitigation measure MM 4.2.3 could reduce operational emissions to a less than significant level. Therefore, this alternative would result in reduced impacts to air quality and GHG emissions compared to the proposed project.

Hydrology and Water Quality – Storm Drainage and Groundwater Supplies

The Reduced Density Development Alternative would result in the development of fewer residential units and thus a smaller area of impervious surfaces compared to the proposed project. Therefore, this alternative would generate lower volumes of stormwater runoff and reduce demand for groundwater supplies. Depending on the actual reduction of impervious surfaces, drainage improvements (proposed infiltration basins) may be required, further reducing project footprint impacts.

Noise

Under the Reduced Density Development Alternative, there would be less intense development requiring a shorter construction period. As a result, it is expected that construction noise and vibration impacts would be less than under the proposed project. There would be fewer residential units on the site operating HVAC systems and other stationary noise sources. Additionally, fewer residents and visitors would enter and leave the site, which would result in lower operational noise levels associated with vehicle use. Like the proposed project, mitigation measures identified in this Draft EIR would reduce noise impacts to less than significant levels.

Population and Housing

The Reduced Density Development Alternative would result in the development of fewer residential units than the proposed project, which would have reduced the potential for employment in the region than the proposed project (1 FTEE as compared to the proposed project with 2 FTEEs) and require the consideration of employee housing consistent with Housing Element Policy C-2. Implementation of Mitigation Measure MM 4.10.2 could mitigate this impact.

Public Services and Utilities

The Reduced Density Development Alternative would result in the development of fewer residential units, which would result in less demand for water supply (12.3 AFY as compared to the project at 49.3 AFY), wastewater conveyance and treatment (this alternative would generate 0.013 mgd of wastewater as compared the project at 0.035 mgd), solid waste collection and disposal services, and electricity and propane service. Thus, this alternative would result in reduced impacts to public services and utilities compared to the proposed project.

Transportation and Traffic

The Reduced Density Development Alternative would result in the development of fewer residential units compared to the proposed project, which would result in fewer vehicle trips entering and leaving the project site as well as fewer total vehicle miles traveled in the Tahoe Basin. This alternative would result in similar impacts related to emergency access, driving hazards, and alternative transportation. No significant level of service impacts would occur under this alternative.

Impacts Identical or Similar to the Proposed Project

Biological Resources

The Reduced Density Development Alternative would result in similar impacts to biological resources as the proposed project because this alternative would result in disturbance to the same area as the proposed project. Therefore, the same resources would be affected. Like the proposed project, mitigation measures identified in this Draft EIR could reduce impacts on biological resources to a less than significant level.

Cultural Resources

The Reduced Density Development Alternative would result in similar impacts to cultural resources as the proposed project because this alternative would result in disturbance to the same area as the proposed project. Therefore, the same resources would be affected. Like the proposed project, mitigation measures identified in this Draft EIR could reduce impacts on cultural resources to a less than significant level.

Geology and Soils

The Reduced Density Development Alternative would result in similar impacts related to geology and soils as the proposed project. Any construction on the site would be required to comply with all applicable regulations, which require that project designs reduce potential adverse soils, geology, and seismicity effects to less than significant levels. Like the proposed project, mitigation measures identified for the project in this Draft EIR could be required to address the risk of fault rupture and to ensure slope stability.

Hazards and Hazardous Materials

The Reduced Density Development Alternative would result in similar impacts related to hazards and hazardous materials as the proposed project because generally the same area would be disturbed, requiring the same mitigation measures identified for the project in this Draft EIR to address the recognized environmental concerns identified in the Phase I ESA and emergency access/evacuation.

Hydrology and Water Quality – Water Quality

Development under the Reduced Density Development Alternative would have a similar potential to degrade surface water and groundwater quality, which could be mitigated to a level of insignificance through compliance with existing regulations and implementation of required BMPs and mitigation measures identified for the project in this Draft EIR.

Public Services and Utilities

Similar to the proposed project, the Reduced Density Development Alternative would incrementally increase demand for public services. Fees and tax revenues from the residential units would fund the necessary expansion of services. It is not anticipated that new or expanded facilities would be required to serve the development under this alternative.

Impacts More Severe Than the Proposed Project

The Reduced Density Development Alternative would not increase any of the impacts identified in Sections 4.1 through 4.12.

Conclusion

The Reduced Density Development Alternative would result in reduced impacts compared to the proposed project and would achieve all of the project objectives.

6.4 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

Table 6.0-1 provides a summary of the potential impacts of the alternatives evaluated in this section, as compared with the potential impacts of the proposed project.

TABLE 6.0-1
COMPARISON OF ALTERNATIVES TO THE PROPOSED PROJECT

Issue	Proposed Project Impact Conclusion Summary	Alternative 1 (No Project – No Development)	Alternative 2 (No Project – Maximum Development)	Alternative 3 (Reduced Density Development)
Aesthetics, Light, and Glare	Less Than Significant	R	W	R
Air Quality	Less Than Significant with Mitigation	R	W	R
Biological Resources	Less Than Significant with Mitigation	R	S	S
Cultural Resources	Less Than Significant with Mitigation	R	S	S
Geology and Soils	Less Than Significant with Mitigation	R	S	S
Greenhouse Gas Emissions	Less Than Significant	R	W	R
Hazards and Hazardous Materials	Less Than Significant with Mitigation	R	S	S
Hydrology and Water Quality	Less Than Significant with Mitigation	R	W	R
Noise	Less Than Significant with Mitigation	R	W	R
Population and Housing	Less Than Significant with Mitigation	R	W	R
Public Services	Less Than Significant	R	S	S
Public Utilities	Less Than Significant	R	W	R
Transportation and Traffic	Less Than Significant with Mitigation	R	W	R

R – Impacts reduced compared to the proposed project

S – Impacts identical or similar to the proposed project

W – Impacts more severe than the proposed project

Based on the evaluation described in this section, Alternative 3 (Reduced Density Development Alternative) is the environmentally superior alternative. It would reduce impacts related to aesthetics, air quality, greenhouse gas emissions, hydrology and water quality, noise, public utilities, and transportation and traffic compared to the proposed project. However, this alternative would not meet the project objective of providing diverse housing opportunities for Squaw Valley residents.

6.5 PROJECT ALTERNATIVES NOT SELECTED FOR DETAILED ANALYSIS

CEQA Guidelines Section 15126.6(f) establishes that the range of alternatives required in an EIR is governed by "rule of reason" that requires the EIR to set forth only those alternatives necessary to permit a reasoned choice, as noted above. The range of alternatives is limited to those that would avoid or substantially lessen any of the significant effects of the project. As provided in Section 15126.6(f)(1), among the factors the lead agency may consider in addressing the feasibility of an alternative are site suitability, availability of infrastructure, general plan consistency, and whether the project proponent can reasonably acquire, control, or otherwise have access to an alternative site. The key question concerning the consideration of an alternate location to the proposed project is whether any of the significant effects identified for

the project would be avoided or substantially reduced by putting the project in another location (Section 15126[f][2]). The CEQA Guidelines also establish that an EIR need not consider an alternative whose effect cannot be reasonably ascertained and whose implementation is remote and speculative.

Off-Site Location Alternative

In addition to the three alternatives analyzed above, the EIR initially considered an off-site location alternative. However, Squaw Valley has limited land areas designated and suitable for residential development and is geographically separated from surrounding communities (e.g., Alpine Meadows, Tahoe City, and Truckee) by significant natural features consisting of mountains, forest areas, and the Truckee River that limit development potential. Thus, alternative locations that are both available and suitable for development of a residential project similar to the proposed project are limited and it is unlikely that the project applicant could reasonably acquire such an alternative site. Furthermore, it is expected that development of an alternative site that is similar to the project site would result in a similar array of project impacts and would simply transfer this impact potential to areas surrounding the alternate site location. Therefore, an off-site alternative location would not be expected to avoid or substantially reduce any of the significant effects of the proposed project. Furthermore, the project site is designated by the Squaw Valley General Plan and Land Use Ordinance and is considered suitable for residential development. An off-site alternative would also conflict with project objectives of promoting infill development in Squaw Valley consistent with the vision of the Squaw Valley General Plan and Land Use Ordinance. As such, off-site alternative locations have been eliminated from detailed consideration in this EIR.